Comments and responses for the proposed SEPA checklist, noise survey and wastewater discharge report for August 2006.

Comments from Kay Rottell from the Benton-Franklin Health District, Solid Waste.

1. [This office has no objection to the facility, provided:] The building has an on-site sewage disposal system permitted, installed, and approved by the Benton-Franklin Health District for all residential wastewater generated by this facility. The facility cannot connect to the existing Agrium plant's existing sewage disposal system. The Agrium plant is located on a separate tax parcel than the proposed ethanol plant.

Columbia Ethanol Plant Holdings, LLC will obtain the appropriate permits and install an on-site sewage disposal system approved by the Benton-Franklin Health District for all residential wastewater generated by the Columbia Ethanol Plant.

2. [This office has no objection to the facility, provided:] The plant has a waste disposal system permitted, installed, and approved by the Washington State Department of Ecology for all industrial wastewater generated by this facility.

Columbia Ethanol Plant Holdings, LLC has applied to the Washington State Department of Ecology for an Industrial Wastewater Discharge Permit and an Industrial Stormwater Permit. Disposal of the wastewater from the Columbia Ethanol Plant will be in accordance with the permits as issued.

3. [This office has no objection to the facility, provided:] This facility is served by an approved public water supply approved by the Washington State Department of Health in accordance with WAC 246-290; a connection to an existing approved water system would require an expansion of that water system approved by the State Department of Health.

The Columbia Ethanol Plant will be serviced by a public water supply system approved by the Washington State Department of Health.

4. [This office has no objection to the facility, provided:] All solid waste generated by the facility managed in an approved fashion. Storage of the distiller's grain in piles (drying) at the site for pa period longer than 3 weeks would require a solid waste handling permit from the Benton-Franklin Health District in accordance with WAC 173-350.

All solid waste generated by the Colombia Ethanol Plant will be managed in accordance with applicable regulations. Distiller's grains are a valuable byproduct in either wet or dried form. Wet distiller's grains have a relatively short shelf life and will usually be removed from the site within 72 hours. Dried distiller's grains that have been dried using a gas-fired drier can be stored for long periods in grain storage facilities. Distiller's Grain is not expected to be stored on site for more than three weeks; however, if it becomes apparent the storage may exceed three weeks a solid waste permit will be obtained.

## Comments from Jeff Parson from the Washington Military Department Emergency, Management Division.

1. When completed will the plant be required to report under EPCRA (Tier II Report)?

Yes, when completed the plant will be required to report under EPCRA (Tier II Report).

2. Are there any provision for plant / site security related to this facility other than those related to police and fire/EMD? I saw nothing in the proposal about local security i.e. fences, access control, personnel background checks, etc. Fuel production facilities are potential terrorist targets as are other refineries and power generation facilities in the state. Since the plan does address air, water, and ground pollution potentials it seems reasonable to me that there should be some security standards in place to "Detect, Deter. Devalue, and Defend" against potential "terrorist" attacks. The result of a successful attack would be pollution in addition to the potential loss of life and press coverage for the terrorist elements.

The ethanol plant will be operated under a federal Alcohol, Tobacco, and Firearms (ATF) permit. The plant will be surrounded by an 8 foot barbed wire topped fence and an electrically controlled front gate. The plant will also have a closed circuit television system so plant operators can observe critical areas of the plant.

Personnel at the time of hiring will have background checks to ensure undesirable personnel are not hired. Plant staff and visitors will be badged for entry into the plant. Local law enforcement personnel will be called when necessary.

## Comments from Michael Shuttleworth of the Benton County Planning Department. The only comments are on the Site Noise Survey.

1. The study does not provide information on the person who performed the study. Please provide the resume of the principal authors which shows their training and experience to complete the noise study.

The Site Noise Survey was performed by Mr. Dennis F. Brendel, Ph.D. Mr. Brendel has the education and experience to perform the Site Noise Survey. Mr. Brendel has over 25 years of experience in performing and directing site noise surveys for coal-fired power plants, oil-fired turbine peaking plants, nuclear power plants, nuclear processing facilities, smelters, and rock crushing plants. Mr. Brendel's resume is attached for your review.

2. The study needs to provide what time of day the noise levels were recorded.

The Site Noise Survey was performed in the morning between 10:00am and 12:00 noon.

3. Will the plant be operating 24 hours a day? If so the noise study should look at the impact of noise levels at night.

The ethanol plant is located in an industrial area surrounded by a railcar repair yard, two fertilizer plants, a compressed air plant, and a natural gas fired turbine. One mile to the west is the main line of the BNSF with trains passing frequently. In this environment, the ethanol plant will operate 24 hours per day, 7 days a week. However, the primary work activities that produce the plant noise are conducted on the day shift. Noise on the day shift will come primarily from trucks, cars, and unloading of trains. These activities are curtailed on the swing shift in the evening and night shift. Thus the primary noise in the area will come from cars, trucks, and trains that are operating in the adjacent areas. Noise from the ethanol plant in the evening and night are inside the plant and will contribute very little to the evening and nighttime surrounding noise levels. The highest noise level comes from the hammermill. The hammermill is double insulated in an insulated enclosure inside an insulated building.

4. The study provides the noise impacts of some part of the proposed plant at distances of 1 meter and that the expected noise level at the plant fence will be between 42 and 52 dBA, but it does show the location of the noise sources and their distances from the plant fence. This information is needed to evaluate the study. More information is needed showing how the study determined that the projected noise levels at the fence will be between 42 and 52 dBA.

Normal suburban ambient noise from man activities ranges from 60 decibels in the low octaves to 30 decibels in the high octaves. Past noise studies have shown the typical evening suburban noise levels range from 30 to 60 decibels. The ethanol plant is expected to operate within the range of 45 to 55 decibels with the exception of passing cars, trucks, and unit train unloadings. The ethanol plant site is surrounded by industry that utilizes cars, trucks, and trains. Therefore, the ethanol plant is not expected to add any new sound pressure levels that do not currently exist.

Noise levels emanating from the ethanol plant were estimated from ICM, Inc. information for an operating ethanol plant. Noise levels from an operating ethanol plant at 100 meters are the following:

Location	Low Frequency	High Frequency
North East of the Plant	68 dBA	28 dBA
South West of the Plant	62 dBA	30 dBA
South East of the Plant	70 dBA	54 dBA

The nearest resident from the ethanol plant is 1850 feet to the southwest. Estimates in the noise level drops 6 to 8 dBA for every doubling of the distance the noise levels at the nearest residence would be a decline in the noise of 15 dBA to 20 dBA. (2)

Noise level at nearest residence	Low Frequency	High Frequency
would be the range of:	42 – 55 dBA	30 - 39  dBA
Site boundary	55 dBA	30 dBA
(900 feet to the west)		

- (1) ICM, Inc. "Operating Ethanol Plant Noise Survey, 2004".
- (2) Corbitt, Robert A. <u>Standard Handbook of Environmental Engineering</u>. New York. McGraw-Hill Publishing Company. 1989. 4.103.

Columbia Ethanol agrees to perform a nighttime noise survey and provide this information as an addendum to the original noise survey. In addition, Columbia Ethanol will provide sufficient information on the method the expected noise level of 45 to 55 dBA at the nearest residence and site boundary were determined.

Higher noise levels are expected inside the plant and these areas are insulated to control the noise level to acceptable levels. No process noises are expected to be heard at the site boundary.

5. The nearest residence appears to be about 1,500 feet from the proposed plant site.

We agree the nearest residence is at least 1500 feet from the proposed plant site. This residence is already surrounded on three sides by heavy industry. An air compressing plant, a fertilizer plant and a rail car repair yard surround the site and are all about 1500 feet from the nearest residence. The sound pressure levels of the ethanol plant are not expected to add any significant noise pressure levels to the residence. The residence has a grove of trees to the east further lowing the estimated noise levels from those projected.

6. One paragraph states the noise level at the plant fence will be between 42 and 52 dBA and another paragraph provide the noise level at the fence at between 45 and 55 dBA.

The paragraph will be corrected to show the expected noise level at the plant fence will be 45 to 55 dBA. This is within the measured survey ambient levels from past noise surveys conducted in suburban areas and the sound pressure levels found at the fertilizer plant at the plant fence.

## Comments from Steven W. Becken of the Benton County Department of Public Works.

1. Benton County is proposing to construct Piert Road, a North/South road, between SR-397 and Bowles Road. This is the road that serves the proposed ethanol plant. A preliminary alignment, which had been agreed upon by all parties involved in the road project, conflicts with a proposed location of the plant. The various parties are working together to resolve this conflict by realigning the proposed road. Contrary to the belief of Columbia Renewable Energy and their attorney, they do need to be a part of this partnership. The proposed new Piert Road was not addressed in the Checklist and should have been with potential solutions to be considered for realignment of the road.

Columbia Renewable Energy is supporting the proposed Piert Road, a North/South road by providing proposed drawings to Agrium, Inc. Agrium, Inc. is providing Columbia Renewable Energy's' input to the committee. This is in accordance with the WDOE requirements and Washington statutes. At this point, Columbia Renewable is not a property owner, but stands ready to provide requested information through Agrium, Inc.

## **WDOE Comments**

1. What are the acreages being purchased from Agrium, Inc. at Hedges and at Finley Plant sites?

The acreages being purchased are 30 acres at Hedges and 150 acres at Finley plant sites.

2. Provide a general physical description on the Hedges and Finley plant sites.

<u>Hedges Plant Site Physical Description</u> – The Hedges Plant Site is located east of Kennewick at 227108 East Hedges Road, Kennewick, Washington 99337. It lies immediately adjacent to the Columbia River at the end of East Hedges Road and just southeast of the Union Pacific Rail Line crossing of the Columbia River.

<u>Finley Plant Site Physical Description</u> – The Finley Plant Site is located east of Kennewick at 231610 East Game Farm Road, Kennewick, Washington 99337. It lies between Cochran and Lechelt Roads immediately west of the Corp of Engineers land boardering the Columbia River in this area. The site is accessed using East Game Farm Road.